

# FRONTIERS

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Forty-seven employees from BLM, Ducks Unlimited, U.S. Fish and Wildlife Service (USFWS), and the Alaska Department of Natural Resources mapped millions of acres of vegetation throughout Alaska this year. Their work was a result of a cost share agreement that BLM - Alaska signed last year with Ducks Unlimited (DU) to develop an earth cover map of Alaska, primarily showing vegetation. The other adjacent land managers joined the band wagon after realizing the cost savings by working together.

The project originates with a satellite image covering about eight million acres. The digital image is loaded into a computer workstation in Alaska, and is assigned an initial classification of one of 30 different types of earth cover.

BLM will gain data on an estimated 78 million acres of public lands in Alaska — which is what BLM expects to permanently manage.

With the new data, BLM can better help endangered species recover. The data will also help FWS manage habitat for large mammals that migrate over wide areas, and DU will determine its priorities for wetlands habitat restoration projects.

### Among the Fields of Green

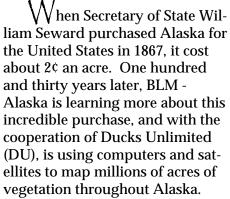


Robert Fisk, an engineer with BLM's Northern Field Office, discusses a flight plan with his helicoptor pilot while the field crew clarifies vegetation at a remote ridgetop in the Talkeetna Mountains.

#### MAJOR FIELD EFFORT HELPS MAP ALASKA VEGETATION



BLM mobilizes field crews to verify computer's choices



"The goal of this project is to develop a uniform statewide digital map of earth cover information (primarily vegetation) that can serve as a ... base for other resource data to be plotted and analyzed," says state project coordinator John Payne.

To reach that goal, BLM-Alaska has negotiated the bureau's largest Challenge Cost Share agreement with DU. This is the second year of the five-year agreement with BLM spending \$250,000 during the 1998 fiscal year. By the time the contract is concluded, Payne estimates that BLM will have data on about 78 million acres of public lands,



Alex Morton (r), from Ducks Unlimited, and pilot Bill Woolen check a field site near Unalakleet during the summer of 1998.

which is very close to what BLM expects to manage permanently in Alaska.

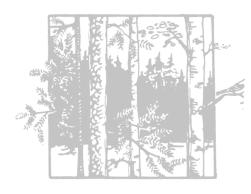
The project begins with a large satellite image (called a Landsat Thematic Mapper) covering about eight million acres that BLM obtains from the EROS (Earth Resource Observation Satellite) Data Center in South Dakota. The digital image is then loaded into a computer workstation in Alaska. This computer analyzes areas as small as five-acre parcels of land for their "spectral responses" to light and then assigns an initial classification of one of about 30 different types of earth cover.

This past summer, BLM and its partners mobilized 47 people into teams to verify data to refine accuracy. "We had seven crews in the field at any given time," says Payne. "They worked on the Kenai Peninsula, and out of the Kanuti and Innoko national wildlife refuges, Glennallen, Aniak

and Unalakleet, rolling up about 600 hours of flying time. This may have been the biggest field effort mounted by BLM-Alaska since its effort along the Dalton Highway in 1989."

A typical crew includes a pilot, a navigator, a vegetation recorder and a vegetation identifier to visit the field sites. They reach a consensus as to which vegetation classification characterizes the site. Two additional crew members remain at camp to service the helicopter and download the day's data during the evening.

"I think we pioneered some new procedures here," says Payne. "We intentionally withheld some of the field data from the computer so we could check its final product; this isn't usually done. We found that the final maps varied in accuracy from 86 percent in the Bering Glacier area (where lots of snow, clouds and moving ice skewed the data), to



93 percent accuracy in NPR-A." This compares to an average 70 percent accuracy if commonly used aerial photo interpretation methods are used instead.

There is hardly a better example of using technology to lower costs. Not only is the new method more accurate, it is far cheaper. Traditional methods would have cost an estimated \$6 an acre; the new method, averaging 5¢ an acre, costs less than 1 percent! After adjusting for inflation, it's less than what we paid for the land — a second bargain at that!

Other land managing agencies including the National Park Service, the U.S. Fish and Wildlife Service (FWS) and the Alaska Department of Natural Resources joined the effort this summer to obtain data for their own adjacent areas at a greatly reduced cost. Jacqui Frair, a DU employee detailed to BLM, said that DU will be using the data to help determine its priorities for wetlands habitat restoration projects.

An earlier phase of the project in Alaska already identified habitat for the Spectacled Eider on the North Slope that currently isn't being used by the eider. The Spectacled Eider is an endangered species and BLM now can better help endangered

species recover. The USFWS would like to expand the development of this data to help it manage habitat for large mammals that migrate over wide areas.

BLM crews from Anchorage are scheduled in 1999 to work in the Stoney River area. The Northern Field Office will work in the Nulatto Hills, and a Glennallen Field Office crew will be based out of Talkeetna. Next summer, crews will continue field checks in the second year of a three-year project for BLM and DU to map 44 million

acres of military operations areas.

"The Air Force is going to use the information to mitigate the effects of low-level training on wildlife," says Frair. "For example, they can avoid areas crucial for sheep or caribou during the spring birthing season. Or they can avoid areas heavily used by recreationists at a particular time of year."

For more information, you can visit our website at:

http://www.ak.blm.gov/ak930/ shrubindex.html

Edward Bovy



Dan Fehringer from Ducks Unlimited checks the vegetation at a site on the Black River Project near Coal Creek in eastern interior Alaska.

# Babbitt signs Record of Decision

"This is a good plan, based on sound science and a very public outreach process." —Secretary of the Interior Bruce Babbitt

Bruce Babbitt signed the Record of Decision (ROD) for the Northeast National Petroleum Reserve - Alaska (NPR-A) Final Integrated Activity Plan/Environmental Impact Statement. The ROD adopts the Bureau of Land Management's preferred alternative for management of the 4.6 million-acre area.

The decision, based on extensive scientific evaluation of the area, makes approximately 87 percent of the northeast quadrant of NPR-A available for oil and gas leasing. Another 580,000 acres will be excluded from oil and gas leasing. This area encompasses nearly all of the key goose molting habitat and critical caribou habitat. Another 900,000 acres is made available for oil and gas leasing, but prohibits all surface activity, or allows only exploratory drilling and essential road and/or pipeline crossings. Special stipulations protect subsistence and provide protection for the resource values found in the planning area.

The decision excludes nearly all of the area of shallow lakes

north and east of Teshekpuk Lake from oil and gas leasing. This area is heavily used by geese during molting season. It also includes areas important to caribou for calving and relief from insects. Similarly, the decision prohibits permanent oil and gas surface occupancy on Teshekpuk Lake and other locations important for fish and subsistence use. Altogether, nearly one-third of the study area will bar surface development of oil and gas.

Babbitt says the decision is a balanced plan that carefully weighs the impacts on a fragile Arctic landscape and its abundant wildlife, with the long-term economic future of Alaskans. "A great deal of hard work went into the planning process and I believe with this decision the Department has complied with the law and the intent of Congress when it authorized leasing in the National Petroleum Reserve in 1981," says Babbitt."

BLM is developing a schedule to implement the complex components of the decision, and for conducting an oil and gas lease sale. If you would like to order a copy of the decision, you may request one from the BLM - Alaska State Office at (907) 271-5960.

# Oil & gas leasing in the NPR-A

he Bureau of Land Management, with help from the Minerals Management Service, assembled a team of specialists who are busy making the necessary preparations for the first NPR-A lease sale to occur in more than a decade. The sale will be held during the first half of 1999; details will be announced by a news release and an article in the next issue of *BLM-Alaska Frontiers*.

At the start of the planning effort, BLM asked industry to identify areas of interest. The responses are now being considered in the context of the decisions in the Final Environmental Impact Statement and Record of Decision.

BLM must determine what portion, if not all, of the area made available for oil and gas leasing under the preferred alternative, will be offered in the first lease sale. BLM must also determine which terms and conditions will apply to each lease.

Once tracts have been delineated and reviewed for land status, BLM will publish a proposed Notice of Sale. Industry will then evaluate the offerings and submit sealed bids by a specified date. The state and federal governments will split any royalties on a 50/50 basis.

The last sale (#84) was held on July 18, 1984. Sixty-four tracts totaling 1,500,000 acres were offered, but no bids were received. A fifth sale (#851) was planned for May 15, 1985, but was cancelled by the BLM-Alaska State Director due to lack of industry interest in the previous sale. Three prior sales in the early 1980s resulted in bids totaling \$4,106 million for leases covering 1.35 million acres.

## Okay, ... let's give it another try



A rehabilitated raven is released September 26 at the Bureau of Land Management's Campbell Tract by volunteers of the Anchorage Bird Treatment and Learning Center.

Volunteers called the bird Sparky, since he was brought to the center after an unfortunate collision with electrical wires cost the raven his feathers. After months of intensive rehabilitation, Sparky regrew a glossy coat of feathers and was ready for release as students and their families cheered his return to the wild.

## redging up a solution

### ADVISORY COUNCIL ADDRESSES DREDGE MINING ON THE FORTYMILE RIVER

he Bureau of Land Management's Alaska Resource Advisory Council passed a resolution in September urging BLM to limit the number of long-term camping permits for suction dredge operations within a wild segment of the Fortymile Wild and Scenic River. The 12-member Resource Advisory Council (RAC) advises BLM on resource and land management issues for 86 million acres of public lands within Alaska. It includes representatives from industry, conservation interests, Native organizations, and the public at large.

The council worked for three years with miners, recreationists and officials from the State of Alaska and BLM to craft a resolution which would allow miners to set up temporary inland camps under certain stringent conditions. The council hopes to resolve long-standing differences in state and federal policies affecting mining activities on the Fortymile



River and within the historic Fortymile Mining District.

The permits recommended by the RAC would allow miners to move their camps from highly visible gravel bars to screened inland sites along the river corridor. In addition to improving the scenic qualities of the river, moving camps from the gravel bars would reduce the risk of accidents when water levels rise, causing supplies and equipment to float downstream.

Council chair Joan Travostino says, "This resolution recognizes that with a collaborative effort of the user groups of the Fortymile Wild and Scenic River, mining — which has occurred on the Fortymile for 100 years — can exist in an area designated more recently as a wild river." The Fortymile, designated a wild and scenic river in 1980, boasts a rich mining history dating from 1886.

BLM will do environmental assessments this winter to determine how camping on wild uplands might affect the river's values under the Wild and Scenic Rivers Act. The outcome will determine whether BLM can implement the council's resolution for the next mining season.

If you would like a copy of the council's resolution or minutes of the last meeting, contact BLM at 222 W. 7th Ave., #13, Anchorage, AK 99513 or call 907-271-5555.

— Teresa McPherson



BLM's new website outlines film permit process

he Bureau of Land Management has a new Internet site outlining the commercial film permitting process. The website: http:/ /www.blm.gov/nhp/what whatwedo/commercial/ filming/ is a coordinated, national point of entry to a process delegated to local BLM offices. The Motion Picture Association of America has given positive reviews to the website.

The site includes: 1) a description of filming activities which require a permit; 2) lists of the most popular scenic sites for filming, along with BLM state and local contacts for those sites; 3) applications that can be downloaded, filled out and submitted online where local BLM offices accept online submissions, and 4) links to state and regional film commissions.

For more information, contact David Quick, 1-202-452-5138.

#### COSTS OF FIREFIGHTING LAST LONG AFTER THE SMOKE IS GONE

#### ighting wildland fires is a costly business, and one key task is to determine the costs of fighting the fire and assign them to the responsible parties. The Bureau of Land Management's Alaska Fire Service and the Alaska Division of Forestry sign an annual operating agreement for cooperative fire protection in Alaska. The agreement says costs for fires starting in critical, full or modified protection areas will be divided according to ownership of the acreage burned. A recent example is the Carla Lake Fire in Interior Alaska this past summer, where both federal and state land was involved and costs of suppression are expected to exceed \$10 million.

The fire began on Fort Greely in a modified area bordering the military impact zone to the south and state land to the north which was in full protection because of residential and commercial timber values. The fire burned off the military reservation and moved onto state land, triggering a major suppression effort.

As costs rose, finance specialists tracked and coded them to the different accounting systems used by the BLM, the state and the U.S. Forest Service.

Each day, the Situations Unit on the fire prepared a perimeter map showing the acreage burned. When suppression efforts were done, a final map was prepared and sent to the Combined Dispatch Office for the Tanana, Upper Yukon and military zones.

The staff in the dispatch office had the lead for determining ownership. Working with BLM's

# ho pays the bills?



Towering columns of smoke hampered visibility for hundreds of miles during the Carla Lake Fire last summer. The fire burned more than 57,000 acres of public land near Delta Junction in Interior Alaska.

master title and land status registry and state of Alaska land status plats, they transferred ownership information from the township plats to the inchto-the-mile topographic maps used for the fire. The final count showed 30,332 acres of state land in full protection; 14,463 acres of military land in modified protection; 8,795 acres of military land in limited protection; and 130 acres of BLM land in full protection.

After state and federal expenditures are totaled, they will be assigned according to the percentage of the acreage burned, Doolin says. "If the percentage of federal expendi-

tures is higher than the percentage of federal acreage burned, then the state of Alaska reimburses the federal treasury for the difference." Likewise, if state expenditures are higher than the percentage of state land burned, the federal government reimburses the state for the difference.

Costs of the fire are still being tallied up. The agreement between BLM and the state calls for total costs to be determined by May 1, 1999, and bills of collection to be sent by May 15. Other costs will be added and the final payments will be made by December 1, 1999.

— Andy Williams

### No fires, firearms fireworks, ...

New supplemental rules now make management of the Campbell Tract more consistent with existing Anchorage municipal ordinances on adjacent park lands. The new rules prohibit the use of motor vehicles except on designated roads; the use of firearms, air guns, paint guns, archery equipment, traps or snares; dogs and domesticated animals not on a leash; building fires; camping; consumption of alcohol; use or possession of fireworks; building structures or shelters; or constructing trails.

The closures of certain activities are for visitor safety and resource protection policies established in the Campbell Tract Facility Management Plan.



Deputy Assistant Secretary of the Interior for Lands and Minerals Management Sylvia Baca signed the latest Alaska Native Utilization agreement with Bob Malone, President of Alyeska Pipeline Service Company at the Alaska Federation of Natives convention on October 15.

The federal grant of Right-of-Way for the Trans-Alaska Pipeline System requires a special Alaska Native training and recruitment program. Looking on are Oliver Leavitt of Arctic Slope Regional Corporation, Morris Thompson of Doyon, and Julie Kitka, President of the Alaska Federation of Natives.

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Photos: Jerry Kouzes

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